



A M A T A
living forest intelligence

**Latin American Regional Tropical Forest Investment Forum
ITTO**

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Scarce Resource



- Is the forest a scarce resource?
- To whom?
 - ▶ To the local communities, scarce is the land to plant
 - ▶ To the urban world, scarce is the forest
 - Biodiversity
 - Water
 - Climate
 - Landscape
- Relative concept > Conflicts!

Institutional Conflict



On the institutional sphere, the rules of the game are different for those living inside or outside the forest.

- ▶ In the local culture, it's acceptable to "clean" the forest (culture is part of the institutions)
 - It is not the main cause of deforestation
 - It is the "front door" for agricultural and cattle raising activities
 - More than 20 million inhabitants need to have a source of living...
- ▶ Both nationally and internationally, environmental laws say that the forest is to be protected
- ▶ But the laws, although existing, are not enforced neither in a complete, nor in a coherent way
- ▶ Coherency? Where? How? In relation to whom?

Value and Price



- Scarce resources have high value
- Free land has a high value to the local population
 - ▶ Changes population's life
 - ▶ Offers income alternatives
 - ▶ Demanded for large scale agribusiness activities
 - ▶ Offers real estate value
- The standing forest
 - ▶ Offers very little to the local population
 - ▶ Represents high preservation, maintenance, security and regulatory costs (environmental law) to the large property land owners
- How to get the standing forest to become valuable locally?

Time – Short Term Deforestation

- Deforestation offers short-term income
 - ▶ Wood sales
 - ▶ Short-cycle agriculture
 - ▶ Cattle breeding
- The lack of attachment to the land (ownership) stimulates short-term actions
- Informality and the lack of a solid institutional environment stimulate short-term actions
- Investments are minor and return has to be quick
- Technology and addition of value are not used

Time – Long Term Preservation

- Sustainable forest management offers income on a long-term basis
 - ▶ Timber selling in smaller volumes
 - ▶ Agriculture and animal breeding do not exist
 - ▶ Extractivism generates products with low added value, small volumes, powerful and often opportunistic informal agents
- Needs attachment to the land (possible with undefined land ownership situation?)
- High investments with long-term return
- Emerging technologies
- Environmentally correct products market still not developed
- Underdeveloped financial tools/mechanisms
- Higher risks

Balance



- No-value forest and long term vs. clear cut with land valuation
- Weak institutional environment to the environmental laws and land property rights
- Low quality and quantity of product innovation and environmental services

Is there space to be optimistic?

A World of Scarce Resources



- A world of ignorance
- Can we expect rationality?
- Informational asymmetry
- Hierarchy of rules on scarce resources
 - ▶ International
 - ▶ National
 - ▶ Local
- A world of plurality of rules

Vive la rareté!

- The new scarce resources
 - ▶ Air, water, biodiversity, landscape
 - ▶ Long term thinking
- The old scarce resources
 - ▶ Oil, gas, food
 - ▶ Short term thinking
- “The extension of the scarcity domain is the extension of the conflict domain”
- Price, regulations, elasticity are concepts applied to old scarce resources. How they should be applied on the new scarce resources?
 - ▶ New market rules?
 - ▶ Innovation
 - ▶ Who will be the winners and the losers?
 - ▶ World governance

Types of Scarce Resources

- The ones you see
 - ▶ Relative prices
 - ▶ Economy of alternative sources
 - ▶ Supply and demand rules
 - ▶ Market
 - ▶ Regulations
- The ones you don't see
 - ▶ Inexistence of market
 - ▶ Or market do not reveals the value
 - ▶ Social construction of the market
 - ▶ Collective actions replacing the market
 - ▶ Global x national assets

Rights over Scarcity

- Intellectual protection
- Property rights
- Resources exploitation rights
- Relations with the international commerce
- Economic power concentration
- Resources protection tools
 - ▶ Private actions
 - ▶ Public actions
- The right and the wealth distribution
- The right and the “common assets” > two different approaches:
 - ▶ They are so abundant, that they do not need to be shared
 - ▶ As they become scarce, the property right emerges
 - ▶ Once they are common, they have to be distributed to everyone
- The right to future use

Allocation of savings



- Money is not a scarce resource
- Diversification matters a lot
- Volatility matters
- Stability matters
- Returns expectations matters
- Risk assessment matters a lot
- Reputation matters
- Time matters a lot

Investors



- Institutional the investment basket
- Strategic raw materials supply
- Large forest owners not focused on forest
 - ▶ Security, Maintenance, Transaction costs
 - ▶ US\$ 3 to 5 per hectare
 - ▶ Conflict management costs



The Continuum Paradigm

- Forestry is a **continuum** of native, semi native and planted forests
- Enhanced by the **synergic use of technologies** (silviculture, forest management, planting, harvesting, transporting, adding value), product and services development and management tools
- Helps to **builds asset value** and total returns
- Takes into consideration the forest complexity
- **Multiple products**
- **Increases long-term timber yields**
- Increases native **biodiversity**
- **Social and environmental results are measured as economical benefits**
- **Balance the risk and returns on investments**

Planted + Native Forests

Planted

- Alternative class investment
- Low volatility
- Low risk
- Stability
- Long term returns
- Commodity
- Predictable
- 3% of the basket
- Benchmarking is title of US Treasury
 - ▶ 30 years
 - ▶ IRR 10 to 15%

Native

- Low volatility
- Very high risk
- Medium term returns
- Definitely not a commodity
- Definitely not predictable
- Reputation
 - ▶ Two extremes
 - Sustainable
 - Illegal, predatory
- Definitely no benchmarking
- IRR 2 to 25+%!!
- Potential upsides and opportunities

AMATA's Background



- Forest assets management
- Brazilian entrepreneurs from the financial, forestry and furniture design areas
- New paradigm of forest management as an important economical, social and environmental source of development
- Forestry is a continuum of native, semi native and planted forests



Vision

- ▶ **Sustainability:** The shareholders of AMATA, as well as its management team, believe that **companies are instruments for social transformation**.
- ▶ **Risk management:** AMATA understands its role as a solid company in an emergent industry (tropical native and planted forestry) dealing with a hostile institutional environment. Innovation is a key word in many aspects of the company: products, services, governance and dynamic competences.
- ▶ **Quality and Concept:** to **offer high quality products** with state of the art concepts aligned to the sustainability construction road.
- ▶ **Corporate Governance:** to apply the most **transparent and updated** governance practices, including innovative instruments of social practices and stakeholders engagement.
- ▶ AMATA approach to forestry **exceeds by far the national environmental and social requirements** once all operations must be FSC certified as a minimum standard.



Amata's Objectives

- ▶ Produce social and financial wealth;
- ▶ Aggregate competences that boost the value of native forest products;
- ▶ Promote environmental sustainability;
- ▶ Offer security to investors in a hostile environment, large scale, long term native and planted forest business;
- ▶ Consolidate a model to be replicated;
- ▶ Establish a benchmark for government policies;
- ▶ Be able to transform intangible social-environmental values in tangible economical assets;
- ▶ Be recognized in the financial, industrial, social and environmental world as a competent, reliable and innovative player in the tropical native and planted forestry sector.

PEOPLE

PROFIT

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Strategic Guidelines



- ▶ **Production of selected forest products and services:**
 - Timber products;
 - Non-timber products;
 - Environmental services.

- ▶ **Focus on the forest 'Value chain':**
 - Guide production to optimize the value of the forest and its products;
 - Commodities should only help pay fixed costs.

- ▶ **Balance between Forest and its surroundings:**
 - Environmental and communitarian based approach. Shared benefits;
 - Open and constructive relationship with community.

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Strategic Guidelines

► **Investors relationship:**

- Strong network among investors to identify strategic and institutional partners;
- Be able to identify and receive investments;
- Be able to have a structure clear and clean to investors;
- Be strongly committed to risk assessment and management

► **Intelligence:** to be able to put together different dynamic competences covering:

- The fragile institutional environment;
- The complex relationship with communities and stakeholders (direct, indirect, neutral, favorable and hostiles);
- The adding value process;
- Innovative financial instruments and architectures;

► **Cluster of business:** to lead a cluster of enterprises covering all areas related to timber and non-timber products, such as pharmaceuticals, cosmetics, food, furniture, design, environmental services, financial services and others.

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Amata's focus: Forest Value Chain

This is AMATA!



Native Forests – The industry



- Passing through important changes
- Moving from predatory activity - clear cuts and exclusive use as a timber source - to sustainable management -selective and minimum impact logging and multiple uses of the resources
- Solid timber industry sales achieves US\$ 8,2 billion per year
- One third exported
- 10 thousand sawmills and 2,5 million people
- One third relies on the Amazonian forest
- 90% considered predatory and non sustainable
- Less than 1% is presently certified.

Native Forests – AMATA´s approach



- The value of the standing forest as an opposition to the traditional clear cut system
- Multiple uses of the forest resources (timber, non timber, environmental services)
- Maximum value to the forest resources through state of the art technology assessment, quality management and design
- Forest management based on final consumer market behavior, trends and indicators
- FSC is the minimum standard



Plantations – The industry

- One of the most competitive in the world:
 - soil conditions
 - large cultivable available area,
 - short time rotation
 - climate,
 - light,
 - water availability,
 - low operational and labor costs.
- Highest country placed in the BID's Forest Investment Attraction Index
- Pulp industrial capacity is 5,8 million tones per year (US\$ 630/ton)
- 58% of the total consumption of eucalyptus pulp in the world
- Area of about 6 million hectares
- More than 1/3 FSC certified
- Involves 25 thousand employees

Country and Business risk management

- Inexistence of formal investment and risk guarantee mechanisms adapted to forest context
- Institutional environment very fragile
- Extremely high transaction costs
- Enormous legal enforcement and fiscal tolerance
- Extremely confuse and instable fiscal system
- Corruption at all levels
- Very poor land ownership situation
- Confuse and instable regulatory framework
- Certification systems not yet consolidated
- Corporate governance is emergent in tropical forest business
- Family owned business
- Stakeholders consultation and engagement not a common practice in tropical forest business
- Very poor logistic infrastructure of roads and ports in tropical forest areas, as much as very poor telecommunication infrastructure
- Unbalanced energy generation and distribution

Innovation and technology management

- Tropical forest economy is emerging
- Risks associated to the unbalance on industry scale and industry origin
- Low margins for low added value products
- Competition with informal / illegal loggers
- Enormous technological tolerance (very low tech and high tech companies in the same industry)
- Multi-optional vertical integration possibilities
- Operational procedures into the beginning of the technological curve
- Sustainability concepts and practices are new area to scientific and technological development
- Lack of skilled human resources availability
- Very poor educational situation on tropical forest areas

Social development challenges



“Social development of communities integrated to the forests through the distribution of wealth based on participation of the results of the adding value chain”

- Lack of production and quality skills
- Lack of market relations skills
- Very poor social organization
- Contracts models between community organization and enterprises
- Monitoring routines to reduce opportunistic actions
- Different types and sources of community financial instruments
- Financial architecture of the network

Environmental challenges

- Environmental issues are at early development stage
 - biodiversity assessment
 - inconsistency of concepts such as HCVF - High Conservation Value Forests
 - metrics and evaluation procedures for ecosystem services not available
 - inconsistent, ideological and scientifically poor debate about plantation versus native forestry
- Native forests
 - Traditional base line is the clear cut done by predatory loggers
 - Applying certified sustainable management forestry in large scale improve the value of the native forests
 - Creation of wealth to local population reduces environmental risks
- Plantations
 - FSC as minimum requirement
 - Forests for energy / mining industry replaces the consumption of native forests
 - Impact of climate change - replacement of oil as fuel.

Commercial challenges

- Role in the development of the market for responsibly-produced wood
- Demand is increasing
- Market emerging, niches
- Very complex market structure (agents, added value products chain)
- Bad image of tropical timber associated to illegal loggers / predatory
- Long and complex cycle for development of Lesser Known Species
- Competition to illegal / informal activities
- Lack of experience and culture of access to external markets
- Complex and wide product mix
- Premium price for certified products are reality but not evident and easy to access:
 - 20 – 40% for timber
 - Less 1% discount for pulp
- FSC improves access to the market

Financial issues

- Lack of adequate financial lines and products for tropical forest industries
- Evolution of the financial sector, moving from indifference to risk management and then to the development of new products and services associated to environmental and social development
- CTP financing helps to reinforce the reputation and the perception of risk reduction for institutional and some strategic investors.
- Being closed to CTP and IFC extremely important for the knowledge development.
- Sharing experiences is much more important than hiding them.



Innovation on the business model

- Risk management protecting the shareholders, partners and essential competences acquired;
- Continuous survey of sources of financing and monitoring of capital movements related to sustainability and forest industry;
- Business diplomacy to deal with an instable and hostile environment;
- Conflicts management and negotiation abilities;
- Establishment and management of relationship network with stakeholders;
- Establish connections to align the FSC and fair trade concepts to high quality products;
- Translate the focus on sustainable consumption in products that meet market trends and needs;
- State-of-the-art in technology: frontier competences in sustainable forest stewardship;
- Transparent, strong and reliable communication skills.